



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

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Ref: EPR-N

June 18, 2006

Kellie Roadifer
Bureau of Land Management
Pinedale Field Office
P.O. Box 768
Pinedale, Wyoming 82941

Re: Draft Environmental Impact Statement for the
Pinedale Resource Management Plan
CEQ #20070038

Dear Ms. Roadifer:

The U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Bureau of Land Management's (BLM) Draft Environmental Impact Statement (Draft EIS) for the Pinedale Resource Management Plan (RMP). While EPA participated as a cooperating agency in the development of the Draft Environmental Impact Statement (SEIS), EPA's review and comments are provided in accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609.

The Draft EIS considers updates to the Pinedale RMP which provides management direction to BLM on planning issues, including: energy resources; vegetation management; cultural resources; travel management; wildlife/urban interface; water quality; and wildlife habitat. The Pinedale Planning Area is located in western Wyoming and is bordered by the Bridger-Teton National Forest on the west, north, and east. In addition, the Bridger Wilderness Area is located directly east of the planning area. The Bridger Wilderness Area is a federal Class I area under the Clean Air Act, requiring special protection of air quality and air quality related values. The planning area also includes areas of extensive oil and gas development such as the Pinedale Anticline and Jonah fields. The total land surface area in the Pinedale planning area is 1,618,140 acres. Of this area, BLM administers approximately 922,880 acres of public land surface and 1,199,280 acres of federal mineral estate in Sublette and Lincoln counties.

The Draft EIS considers four alternatives. Alternative 1, No Action, would provide continuation of existing management. Alternative 2 would maximize oil and gas resources while providing an adequate level of environmental protection. Alternative 3 would maximize environmental protection while allowing for oil and gas production. Finally, Alternative 4, BLM's Preferred Alternative proposes to optimize production of oil and gas resources while providing an "appropriate level of environmental protection". Under Alternative 4, BLM would develop and

implement performance-based objectives and operating standards that would provide the flexibility to adapt management decisions to changing environmental conditions while ensuring appropriate mitigation.

The “appropriate level of environmental protection” under Alternative 4 would vary based on the management area. For “intensely developed oil and gas fields” such as the Pinedale Anticline and Jonah fields, BLM would emphasize efficient and complete development and production of the oil and gas resource. In “minimally developed areas”, emphasis would be placed on traditional multiple use management. BLM would manage for protection of important values during oil and gas exploration, but would also provide opportunity for intensive oil and gas activities. Oil and gas operators in minimally developed areas would have to conform with timing and distance limitations, noise restrictions, spacing of wells, etc. In “large block no surface occupancy (NSO) areas”, BLM would manage for protection of wildlife habitats through the offering of oil and gas leases with NSO stipulations. Finally in “unavailable areas” BLM would manage for protection of wildlife habitats through indefinitely postponing the availability of lands for oil and gas leasing. Emphasis in “unavailable areas” would be on providing contiguous wildlife habitat, providing wildlife refuge areas and migration routes, and public land recreation opportunities. However, the Draft EIS appears to leave open the possibility that “intensely developed fields” could be enlarged; and “minimally developed areas” and “large block NSO areas” could become areas managed for intense energy development, once down-hole well density reaches one every 160 acres.

EPA’s primary concern is when, and if, intensely developed areas emerge or enlarge, that the appropriate NEPA analysis is completed at that time and includes a comprehensive cumulative impacts analysis. In Chapter 2, the Draft EIS indicates that expansion of intensely developed fields and reclassification of minimally developed fields or NSO areas would occur on a case-by-case basis and with proper environmental documentation. Elsewhere (page 2-143), the Draft EIS states “Should a discovery be made and proceed to development, these (minimally developed) lands would be moved to intensely developed field status.” EPA is concerned by the possibility that intensely developed fields could expand piecemeal, in a case-by-case, APD-by-APD basis, without the opportunity for a full environmental cumulative impact analysis. While this may not be BLM’s intent, we recommend the Final EIS clarify the process for expansion of areas that are managed for intense energy development and the additional NEPA analysis that would be completed.

The most recent Draft Supplemental EIS prepared for the Pinedale Anticline, an “intensely developed field”, disclosed potential cumulative impacts to air quality and to wildlife, which if unmitigated, could be significant. Given the magnitude of the potential impacts from “intensely developed fields” in proximity to highly sensitive natural resources, EPA recommends that BLM complete a comprehensive cumulative impact analysis for any expansion of an “intensely developed field” or new “intensely developed field”. It is unclear from the Draft EIS, if and when these intensely developed fields expand, how BLM will meet the management goals for wildlife, vegetation, and multiple use management detailed in the Draft EIS.

In addition to our primary concern regarding expansion of “intensely developed fields”, EPA is providing recommendations for the performance-based objectives and adaptive management plan. EPA also has questions and recommendations on the projection of oil and gas wells to be developed in

the Pinedale Resource Management Area. The enclosed “Detailed Comments” include discussion and comments on air quality, water quality, and wildlife.

The RMP is a very expansive plan and the Draft EIS characterizes potential environmental impacts only very broadly. This may be why BLM proposes performance-based objectives and adaptive management with the Preferred Alternative. While EPA generally supports the use of adaptive management, it is important that the goals, measurable indicators, monitoring strategy, and funding be clearly identified at the onset. The effectiveness of BLM’s proposed mitigation measures will depend greatly on the ability to monitor and detect adverse effects. EPA recommends the Final EIS include a detailed adaptive management strategy, framework, measurable indicators and monitoring plan.

EPA is also concerned that the Draft EIS may have underestimated the anticipated oil and gas development expected to occur in the Pinedale Resource Management Area. In the Draft EIS, oil and gas development is expected to nearly quadruple from an estimated 2,173 in 2001 to 8,383 in 2021. It is unclear, however, how this estimate was calculated. Based on a combined total of approximately 8,700 wells (including existing and proposed development) projected in the recent Jonah Infill and Pinedale Anticline EIS’s, it would appear the estimate used in the Draft EIS may be an underestimate. EPA recommends BLM provide a detailed explanation of how the development was estimated in the Final EIS.

EPA’s Rating

Consistent with Section 309 of the Clean Air Act, it is EPA’s responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. EPA is rating this Draft EIS as Environmental Concerns – Insufficient Information (EC-2). The EC rating means that EPA has identified environmental impacts that should be avoided in order to fully protect the environment. The 2 rating means EPA finds that the Draft EIS does not contain sufficient information to fully assess environmental impacts that should be avoided in order to fully protect the environment. In addition to EPA’s detailed comments on the Draft EIS, a full description of EPA’s EIS rating system is enclosed.

EPA recognizes the complexity of managing multiple uses in a highly sensitive natural environment, such as the Pinedale Resource Area. We hope that throughout implementation of the RMP, BLM will seek ways to reduce adverse environmental impacts. If you have any questions regarding our concerns, our detailed comments, or this rating, please contact Joyel Dhieux at 303-312-6647 or me at 303-312-6004.

Sincerely,

/signed/

Larry Svoboda
Director, NEPA Program
Office of Ecosystems Protection and Remediation

enclosures

**Detailed Comments by the Region 8 Environmental Protection Agency
Environmental Impact Statement
Pinedale Resource Management Plan
Pinedale, Wyoming**

Air Quality

In RMP's that plan for significant oil and gas development, EPA generally encourages and supports quantitative air quality modeling that includes dispersion modeling. For the Pinedale RMP, however, EPA concurred with BLM's proposed approach to complete the detailed air quality analysis and dispersion modeling as part of the Pinedale Anticline Draft Supplement EIS. EPA provided comments to BLM on the detailed air quality analysis as part of our comments on the Pinedale Anticline Draft Supplemental EIS in April, 2007.

The Pinedale Anticline Draft Supplemental EIS disclosed potential impacts to visibility in the Class I Bridger Wilderness Area, which if unmitigated, could be considered significant. In the Pinedale Anticline Draft Supplement EIS, however, BLM detailed a mitigation strategy that was developed in collaboration with Wyoming DEQ and EPA with the goal of achieving zero days of visibility impairment at the Bridger Wilderness Area. Given the results of the modeling analysis and the mitigation strategy that was necessary, it is important that BLM proactively analyze and address air quality issues as oil and gas exploration and development occurs in both "minimally developed" and "intensely developed" fields in the resource management area.

For this RMP, BLM completed a qualitative emission comparison approach for analysis of impacts on air quality. The comparison is presented in Table 4-1 and in the Air Quality Technical Support Document. In the qualitative analysis, BLM predicts total emission levels will more than triple under Alternative 4, from 33,777 tons in 2001 to 121,553 tons in 2021 (including Particulate Matter - PM₁₀, Nitrogen Oxides - NO_x, Sulfur Dioxide - SO₂, Carbon Monoxide - CO, Volatile Organic Compounds - VOC, and Hazardous Air Pollutants - HAPs). In the Draft EIS, BLM notes most of the increase is the result of oil and gas exploration and development. Oil and gas development is expected to nearly quadruple from an estimated 2,173 in 2001 to 8,383 in 2021. Further, approximately only 61% of the Federal mineral estate is leased (page 3-39). It is unclear, however, how this estimate was calculated. Based on a combined total of approximately 8,700 wells (including existing and proposed development) projected in the recent Jonah Infill and Pinedale Anticline EIS's, EPA is concerned that the Draft EIS may have underestimated the number of wells that will be developed in the Pinedale RMP and we recommend BLM provide a detailed explanation of how the development was estimated in the Final EIS.

EPA also recommends the Final EIS incorporate the latest data and discussion on ozone monitoring and formation in the area. To EPA's knowledge, the latest ozone analysis was completed in February, 2007 as supplemental information for the Pinedale Anticline Draft Supplemental EIS. This analysis became available following the release of the Pinedale RMP Draft EIS. Elevated ozone levels have been recorded during the winter months at several ambient air monitoring stations in the

area. The air quality modeling also predicted elevated levels of ozone in summer months. While the area remains in compliance with National and Wyoming Ambient Air Quality Standards (NAAQS and WAAQS), this issue clearly demands close observation. EPA recommends the ozone discussion be expanded in Chapter 3, Affected Environment, and included in Chapter 4, Environmental Consequences.

EPA also recommends the Final EIS include the latest data and modeling of visibility impacts to the Class I Bridger Wilderness Area, the Fitzpatrick Wilderness and other neighboring sensitive areas. This information and discussion should be included in Chapter 3, Affected Environment, and in Chapter 4, Environmental Consequences and Cumulative Impacts. Modeling conducted for the Pinedale Anticline SEIS predicted 45 days of visibility impairment over 1.0 dv at the Bridger Wilderness Area for 2005 (Draft SEIS Pinedale Anticline, Table 3.11-5, page 3-64). EPA notes that a similar table is included in the cumulative impacts section, however, this may be a more appropriate discussion for Chapter 3, Affected Environment, since the analysis is for 2005. The Final EIS should also include a discussion of visibility in Chapter 4, Environmental Consequences, and a discussion of how BLM will address and mitigate future visibility impacts.

Water Quality

It is important for the Draft EIS to disclose to the public and other reviewers that different uses must be protected in the different waterbodies in the planning area. EPA recommends the Final EIS include a map of the surface waters and their respective classification under the Wyoming DEQ Surface Water Standards. For example, the Draft Supplemental EIS for the Pinedale Anticline noted that “all of the Green River, upstream of the confluence with the New Fork River is designated as Class I water under the Wyoming DEQ Surface Water Standards (WDEQ, 2001), meaning that they are “outstanding” waters that may not be degraded.” EPA further recommends that the Final EIS expand on how the management actions in the RMP (ie. oil and gas development, grazing, vegetation management) will ensure the designated uses of the surface waters are not impaired and how those waters will be monitored.

Performance Based Objectives and Standards

BLM’s Preferred Alternative includes a series of proposed performance-based objectives and standards presented in Appendix 3 of the Draft EIS. Adaptive management and performance-based objectives can be important tools in mitigating and minimizing impacts to the environment. However for these tools to be effective, it is important that the management strategy and framework, measures, monitoring, and funding be clearly identified at the onset. To ensure that these standards and BLM’s management goals for the resource area are being met, EPA recommends this section be expanded to include:

- Measures. Each outcome should be linked to a clear and measurable indicator. For example, how will BLM monitor soil and watershed impacts? What will the indicators be and at what level is the impact considered detrimental? The Final EIS should

describe the consequences and action triggers should an objective fail to be met.

- A monitoring timeframe. In order to identify whether detrimental impacts are occurring and whether adaptive management is necessary, a monitoring timeframe and strategy should be determined. This would include when the monitoring will occur, how often, and by whom. As BLM indicates in Appendix 3, “Monitoring would ensure that adaptive management principles are adhered to and that necessary changes to operating standards can be made in a timely and efficient manner.”
- Funding. EPA believes that the funding to implement the performance-based objectives is critical.
- Stakeholder Involvement. EPA recommends the Final EIS include how BLM will document the progress and report to stakeholders.

Sage Grouse

As part of this RMP and Draft EIS, BLM proposes to manage sage grouse habitat based on the classification of the specific area as intensely developed, minimally developed, or NSO with the ultimate management objective of maintaining “sufficient undisturbed or minimally disturbed greater sage-grouse source habitats to ensure long-term species sustainability and functioning habitats”. Actions to achieve this objective for minimally developed areas include time restrictions and prohibiting surface disturbing activities within 0.25 mile of occupied leks. EPA notes, however, that recent long-term studies on the effects of wellfield development to greater sage-grouse lek attendance indicate that the 0.25 mile buffer surrounding leks, within which surface disturbing activities would be prohibited, is insufficient to maintain function of lek habitats due to wellfield activities and associated noise (Holloran 2005 and Ecosystem Research Group, 2006).

Recognizing that the science continues to emerge on this issue, EPA recommends further analysis of the potential impacts to sage grouse and the potential effectiveness of the actions proposed to meet the sage grouse habitat objective. EPA recognizes the wildlife management expertise of the U.S. Fish and Wildlife Service and the Wyoming Game and Fish Department, and encourages BLM to continue to coordinate with these agencies to assess whether the proposed plan will provide an effective means of ensuring long-term species sustainability, to identify the best available science, and to develop effective adaptive management.

Wildlife

Several wildlife studies have been conducted in the Pinedale area since 2000 and have found the population of mule deer in the Sublette Herd Unit has steadily declined between 2002 and 2005-2006 (Sawyer et. al, 2005); the Sublette Herd Unit moose post season population also has declined from 1999 to 2005 (WGFD); and, the male counts on sage grouse leks that were heavily impacted by gas wells also declined from one year prior to well development (Holloran, 2005). It is unclear from the analysis in the Draft EIS, whether the proposed resource management plan of “intensely

developed”, “minimally developed”, “large block NSO” and “areas unavailable to leasing”, will be protective enough to ensure BLM’s goal of “maintaining functioning big game habitats and migration corridors that allow free movement and use of habitats.” EPA recommends the Final EIS include more information on the anticipated impacts to wildlife.